Defense Technical Information Center
ATTN: DTIC-AI
8725 John J. Kingman Road, Suite 0944
Fort Belvoir, VA 22060-6218
Commercial: 703 767 9120
DSN: 427 9120
FAX: 703 767 9119
E-mail: iac@dtic.mil

Human Systems IAC

Usability Test and Evaluation of the Performance Results Evaluation & Management Information System (PREMIS) for the Defense Technical Information Center (DTIC)

The IAC PMO tracks and oversees Technical Area Tasks (TATs) performed by thirteen IACs. In the 1980s, DTIC began to develop the Performance Results Evaluation & Management Information System (PREMIS) for placing TATs under contract and tracking their performance through close-out. During the development, the objective evolved from simple tracking to a paperless, internet-accessible system serving the needs of the CO, COTR, and IAC personnel. The Human Systems IAC performed a usability evaluation of the system to evaluate the PREMIS operator interface, made recommendations for improving its operability, effectiveness, and user acceptance. Additionally, Human Systems IAC implemented and coordinated an Integrated Product Team (IPT) to work in parallel with its efforts to ensure ongoing representation of all user roles.

Continued on Story 1

Technical Updates of DOD Human Engineering Standards and Handbooks: MIL-STD-1472, DOD-HDBK-763, and MIL-HDBK-759

Several of the major DoD Human Engineering standards and handbooks needed to be updated. The primary standard, MIL-STD-1472 was first published on 9 February 1968, and had not received a substantive technical review and update since 1987. The MIL-HDBK 763, *Human Engineering Procedures Guide* , did not reflect changes resulting from acquisition and standardization reform, and it did not include reference to many newer tools and techniques. Finally, MIL-HDBK-759, *Department of Defense Handbook for Human Engineering Design Guidelines* , was being converted to a tri-service handbook including data removed from MIL-STD-1472D and the *Air Force Systems Command (AFSC) Design Handbook (DH) 1-3* .

Continued on Story 2

Please visit our Web site at http://iac.dtic.mil/hsiac or send us an E-mail at hsiac@wpafb.af.mil

Defense Technical Information Center
ATTN: DTIC-AI
8725 John J. Kingman Road, Suite 0944
Fort Belvoir, VA 22060-6218
Commercial: 703.767.9123
DSN: 427-9123
FAX: 703.767.9119
Email: iac@dtic.mil

Usability Test and Evaluation of the Performance Results Evaluation & Management Information System (PREMIS) for the Defense Technical Information Center (DTIC) (continued)

Human Systems IAC collected information about system requirements from the PREMIS documentation, user interviews, and IPT meetings. Also, a User's Survey was developed and administered to verify the system functionality. A workshop was then conducted during which PREMIS users and IPT members were asked to evaluate the usability of the system by examining each PREMIS form and screen. The workshop was also used to collect recommendations for changing and for improving training. In addition, Human Systems IAC employed human factors experts and PREMIS subject matter experts to determine PREMIS compliance with over 100 proven software interface design guidelines.

Based on these findings, Human Systems IAC provided recommendations for software improvements and is currently developing a full-scale training program for PREMIS users. A systems approach including analysis, design, development, implementation, and testing will be employed in a spiral fashion to accommodate the evolving nature of PREMIS. Users will be provided with an accurate model of where they fit into PREMIS and what PREMIS does. Job aids to assist in task performance will be developed for each type of user that will be easily updated as PREMIS evolves.

Please visit our Web site at http://iac.dtic.mil/hsiac or send us an E-mail at hsiac@wpafb.af.mil

Defense Technical Information Center
ATTN: DTIC-AI
8725 John J. Kingman Road, Suite 0944
Fort Belvoir, VA 22060-6218
Commercial: 703 767 9120
DSN: 427 9120
FAX: 703 767 9119
E-mail: iac@dtic.mil

HSIAC Human Systems IAC

HSIAC | Story 1 | Story 2

Technical Updates of DOD Human Engineering Standards and Handbooks: MIL-STD-1472, DOD-HDBK-763, and MIL-HDBK-759 (continued)

Human Systems IAC (formerly CSERIAC) personnel reviewed *MIL-STD-1472* for accuracy and currency and other standards and scientific literature to identify new material that should be considered for incorporation. Human Systems IAC personnel proposed new material to update current content and to incorporate information about new technologies and concerns. The proposed material was written using language compatible with the conventions of *MIL-STD-1472* , indicated where the information should be incorporated into *MIL-STD-1472* , and provided rationale and references for the new information. The paragraphs proposed by Human Systems IAC personnel were reviewed by subject matter experts and revised as needed prior to submission to the client. The client then worked with a joint-service steering committee in a consensus-based process to select the new material to be incorporated into *MIL-STD-1472* .

Revised versions of these documents, *MIL-STD-1472F Department of Defense Design Criteria Standard Human Engineering*) and *MIL-HDBK-46855A Human Engineering Program Process and Procedures* , have been completed and their predecessor documents have been cancelled. The new versions, *MIL-STD-1472F* http://163.12.140.8/eAccess/index.cfm?ident_number=36903 (23 August 1999) and *MIL-HDBK-46855A* (17 May 1999) http://163.12.140.8/eAccess/index.cfm?ident_number=201925 are now available for download from the Web. *MIL-STD-1472F* includes new information about topics such as color coding the integration visual and audio warnings/cautions, physical accommodation (the section formerly called anthropometry), and vibration. It also includes information about new technologies such as liquid crystal displays, stereoscopic displays, head up displays, helmet-mounted displays, telephone systems, speech displays, and speech recognition. *MIL-HDBK-46855* now includes information about procedures that should be performed and about available tools and techniques. Performance of these tasks helped update and consolidate key DoD human engineering guidance.

Please visit our Web site at http://iac.dtic.mil/hsiac or send us an E-mail at hsiac@wpafb.af.mil